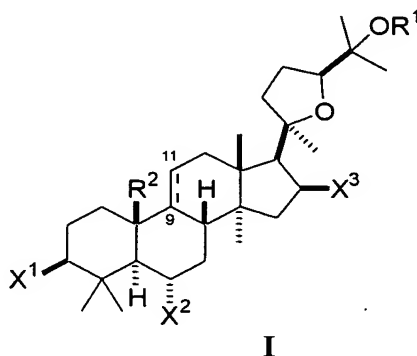


Amendments to the Claims

1. (Original) A method of increasing telomerase activity in a cell or tissue,
5 comprising: identifying a cell or tissue in which an increase in telomerase activity is desired, and contacting said cell or tissue with a formulation of an isolated compound of formula I:



where:

- 10 each of X^1 , X^2 , and X^3 is independently selected from hydroxy, lower alkoxy, lower acyloxy, keto, and a glycoside;
 OR^1 is selected from hydroxy, lower alkoxy, lower acyloxy, and a glycoside;
wherein any of the hydroxyl groups on said glycoside may be substituted with a further glycoside, lower alkyl, or lower acyl, such that the compound includes a
15 maximum of three glycosides; and
 R^2 is methyl and $----$ represents a double bond between carbons 9 and 11; or, R^2 forms, together with carbon 9, a fused cyclopropyl ring, and $----$ represents a single bond between carbons 9 and 11.

- 20 2. (Original) The method of claim 1, wherein said compound includes zero, one, or two glycosides, none of which is substituted with a further glycoside.
3. (Original) The method of claim 2, wherein said compound includes zero or two glycosides, none of which is substituted with a further glycoside.
- 25 4. (Original) The method of claim 1, wherein each said glycoside, when present,

is of the D configuration.

5 5. (Original) The method of claim 1, wherein R^2 forms, together with carbon 9, a fused cyclopropyl ring; and ---- represents a single bond between carbons 9 and 11.

10 6. (Original) The method of claim 2, wherein each of X^1 and X^2 is independently selected from hydroxy, lower alkoxy, lower acyloxy, and a glycoside, and X^3 is selected from hydroxy, lower alkoxy, lower acyloxy, keto, and a glycoside.

7. (Original) The method of claim 2, wherein X^1 is OH or a glycoside, each of X^2 and OR^1 is independently OH or a glycoside, and X^3 is OH or keto.

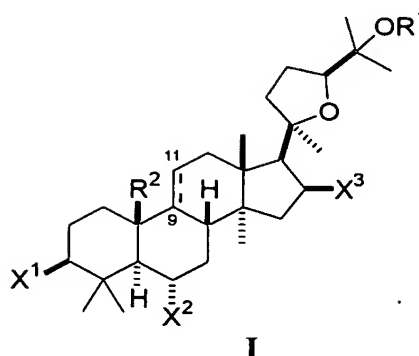
15 8. (Original) The method of claim 2, wherein the compound is selected from astragaloside IV, cycloastragenol, astragenol, astragaloside IV 16-one, cycloastragenol 6- β -D-glucopyranoside, and cycloastragenol 3- β -D-xylopyranoside.

20 9. (Original) The method of claim 8, wherein the compound is selected from astragaloside IV, cycloastragenol, astragenol, and astragaloside IV 16-one.

10. (Original) The method of claim 9, wherein said compound is astragaloside IV.

11-29. (Cancelled)

25 30. (Currently amended) A pharmaceutical or nutraceutical composition comprising, in a pharmaceutically or nutraceutically acceptable vehicle, respectively, a compound of formula I:



where:

each of X^1 , X^2 , and X^3 is independently selected from hydroxy, lower alkoxy, lower acyloxy, keto, and a glycoside;

5 each of X^1 and X^2 is independently selected from hydroxy, lower alkoxy, lower acyloxy, keto, and a glycoside;

X_3 is keto;

OR^1 is selected from hydroxy, lower alkoxy, lower acyloxy, and a glycoside;

wherein any of the hydroxyl groups on said glycoside may be substituted with a
10 further glycoside, lower alkyl, or lower acyl, such that the compound includes a maximum of three glycosides; and

R^2 is methyl and ---- represents a double bond between carbons 9 and 11; or, R^2 forms, together with carbon 9, a fused cyclopropyl ring, and ---- represents a single bond between carbons 9 and 11.

15

31. (Original) The composition of claim 30, wherein said compound includes zero, one, or two glycosides, none of which is substituted with a further glycoside.

32. (Original) The composition of claim 30, wherein each said glycoside, when
20 present, is of the D configuration.

33. (Original) The composition of claim 30, wherein R^2 forms, together with carbon 9, a fused cyclopropyl ring; and ---- represents a single bond between carbons 9 and 11.

25

34. (Original) The composition of claim 30, wherein X^1 is OH or a glycoside, and

each of X^2 and OR^1 is independently OH or a glycoside.

35-82. (Cancelled)

5

83. (New) The composition of claim 30, wherein said composition is a nutraceutical composition.

84. (New) The composition of claim 30, wherein said composition is a pharmaceutical composition.

10

85. (New) The composition of claim 30, wherein the compound is selected from astragaloside IV, cycloastragenol, astragenol, astragaloside IV 16-one, cycloastragenol 6- β -D-glucopyranoside, and cycloastragenol 3- β -D-xylopyranoside.

15

86. (New) The composition of claim 30, wherein each of X^1 and X^2 is independently selected from hydroxy, lower alkoxy, lower acyloxy, keto, and a glycoside; and X_3 is keto.

87. (New) The composition of claim 86, wherein the compound is astragaloside IV 16-one.

20

88. (New) The method of claim 9, wherein the compound is cycloastragenol.

89. (New) The method of claim 9, wherein the compound is astragenol.

25

90. (New) The method of claim 9, wherein the compound is astragaloside IV 16-one.